

CLAIMS:

1. A bone marker for use in image guided surgery, comprising a support having an anchor mechanism for anchoring the support in a bone, the bone marker further comprising at least one reference member detectable by an image guided system, the at least one
5 reference member being attached to the support, in which the support comprises at least one limb which is resiliently deformable.
2. A bone marker as claimed in claim 1, in which the support further comprises at least one limb which is rigid.
3. A bone marker as claimed in claim 1, in which a resiliently deformable limb
10 comprises a tightly wound helical spring.
4. A bone marker as claimed in claim 3, in which the abutting surfaces of the wire are flat.
5. A bone marker as claimed in claim 1, in which a resiliently deformable limb is made from a damped elastomer.
- 15 6. A bone marker as claimed in claim 1, in which a resiliently deformable limb is made from a shape memory alloy.
7. A bone marker as claimed in claim 1, in which the ratio of the outer diameter of a resiliently deformable limb to its inner diameter is at most 3:1.
8. A bone marker as claimed in claim 1, in which the anchor mechanism comprises at
20 least one fixation member for anchoring the bone marker in the bone, and a coupling member for coupling the support to the fixation member.
9. A bone marker as claimed in claim 8, in which the coupling member is adjustable to allow rotation of the support about the fixation member.

-13-

10. A bone marker as claimed in claim 8, in which the at least one fixation member is a threaded screw.

11. A bone marker as claimed in claim 10, in which the diameter of the threaded screw is not more than about 2 mm.

5 12. A bone marker as claimed in claim 1, in which the reference members transmit signals.

13. A bone marker as claimed in claim 1, in which the reference members reflect signals.

14. An image guided surgery system which comprises:

- 10 a. a bone marker as claimed in any of the preceding claims,
- b. a processing system for calculating the position of the reference members and a location on the bone relative to the position of the reference members,
- c. an actuation system for moving an apparatus to a location
- 15 calculated by the processing system.